

Obituary

E. P. GEE

(With a plate)

The death of E. P. Gee on 22nd October, 1968, is the grievous loss of a valued friend to the Society and to the Wildlife Conservation movement in India.

Edward Pritchard Gee was born in 1904 in County Durham and was educated at Durham School and Immanuel College, Cambridge. He spent his working life as a planter in Assam retiring in 1959 to reside at Shillong.

Gee, a dedicated conservationist, found on retirement, the time he needed for incessant advocacy of the cause of wild life conservation in India both by the written and the spoken word. He rendered invaluable service to the Indian Board for Wild Life from the time of its formation, and was the Eastern Regional Secretary of the Board for many years until his death. As a member of the Survival Service Commission of the International Union for the Conservation of Nature and Natural Resources, he was able to maintain close liaison with international bodies and the foremost naturalists of the world, and was able to promote several basic ecological studies in India. He had drawn up a list of terms for the Indian Board for Wild Life, and a Model Bill for the States to adopt, so that the law relating to National Parks and Sanctuaries might be standardised throughout the Indian Union—a measure of vital importance under the conditions prevailing in the country. Unfortunately his hint has not been taken, and several states have yet to enact suitable legislation.

Gee was a naturalist in the truest sense of the word. A perfectionist, who was willing to spend his energy and time in tireless field observation and photography of wild life. His precise notes on wild life, and conservation problems and outstanding photographs of animals and flowers are ample evidence of his knowledge and expertness. He was an enthusiastic gardener, and orchid collector. His garden in Shillong contained some of the rarest species of the eastern Himalayas collected by himself on the special expeditions he was constantly making to remote parts of the region.

Gee will be remembered for his book *THE WILD LIFE OF INDIA* which has done so much to focus public attention and interest on the

fauna of the country and the need for its conservation. Also as the discoverer of the Golden Langur in Bhutan which has been named *Presbytis geei* after him.

E.P. as he was known to his friends leaves memories of his generosity, hospitality, enthusiasm and intense interest in India's flora and fauna, and an abiding love for the people and wild life of the country, in which he had chosen to spend the evening of his life.

Gee joined the Society in 1931 and was a member of its Advisory Committee from 1953. He took the closest interest in its activities and was always ready to help in whatever way he could to further its interests. He has left to the Society all his books, films, photographs, and papers on wild life. The Society will always remain deeply indebted to him.

A list of his publications in the *Journal* is given below.

- 1933 Note on the Indo-Burmese Pied Hornbill (*Hydrocissa malabaricus leucogastra*). (with a plate). 36 (2) : 505-506.
- Note on the development of the casque of the Indo-Burmese Pied Hornbill (*Anthracoceros albirostris*). (with a plate). 36 (3) : 750-751.
- 1937 Strange behaviour of a Tigress. 39 (3) : 614.
- The size of the Jungle Cat (*Felis chaus affinis*). (with a plate). 39 (4) : 850-851.
- 1947 On the Leopard Cat (*Prionailurus bengalensis*). (with a photo). 47 (2) : 371.
- 1948 Black Leopard cubs. (with a photo). 48 (1) : 173-174.
- 1949 A possible cause of blank days when Mahseer Fishing. 48 (3) : 598-599.
- 1950 Wild Life Reserves in India : Assam. (with 2 plates, a map and a table). 49 (1) : 81-89.
- Wild Elephants dying in Assam. 49 (1) : 113-114.
- Effect of atmospheric pressure while fishing. (with a photo). 49 (1) : 128-129.
- Wild Elephants dying in Assam. 49 (2) : 296.
- 1951 Effect of atmospheric pressure while fishing. 49 (4) : 794-795.
- What is the best means of control and destruction of Flying Foxes [*Pteropus giganteus* (Brunn.)]. 50 (2) : 401.
- 1952 The Assam Earthquake of 1950. (with a map and two plates). 50 (3) : 629-635.
- The Management of India's Wild Life Sanctuaries and National Parks (with four plates). 51 (1) : 1-18.
- Possible occurrence of the Snub-nosed Monkey (*Rhinopithecus roxellanae*) in Assam. 51 (1) : 264.
- What is the best means of control and destruction of Flying Foxes [*Pteropus giganteus* (Brunn.)]. 51 (1) : 268.
- Extermination of Snakes upsets balance of nature. 51 (1) : 280-281.
- 1953 The Life History of the Great Indian one-horned Rhinoceros (*R. unicornis* Linn.). (with a plate). 51 (2) : 341-348.
- Wild Buffaloes and Tame. (with a photo). 51 (3) : 727-730.
- Mystery Predator. 51 (3) : 732.
- Further observations on the Great Indian one-horned Rhinoceros (*R. unicornis* Linn.). (with two plates) 51 (4) : 765-772.

- Notes & News : Wild Life in India. **51** (4) : 967-968.
- 1954 Wild Life Preservation in India : Annual Report for 1953 on the Eastern Region. **52** (2&3) : 233-240.
- 1955 The Management of India's Wild Life Sanctuaries and National Parks, Part II. (with four plates). **52** (4) : 717-734.
- The Brow-antlered Deer (*Cervus eldi* MacClelland). (with a plate). **52** (4) : 917-919.
- The Function of Zoological Gardens in the preservation of Wild Life. (with four plates). **53** (1) : 79-85.
- The Indian Elephant (*E. maximus*) early Growth Gradient and intervals between calving. (with four plates). **53** (1) : 125-128.
- A new species of Langur in Assam. (with a sketch map). **53** (2) : 252-254.
- Great Indian one-horned Rhinoceros (*R. unicornis* Linn.) cow with (presumptive) twin calves. **53** (2) : 256-257.
- 1956 The management of India's Wild Life Sanctuaries and National Parks, Part III. (with one coloured plate and five black and white plates). **54** (1) : 1-21.
- Lion v. Tiger. **54** (1) : 171-173.
- Predator and Prey at Salt-Licks. **54** (1) : 181.
- 1958 Bharatpur 'Wild' Cattle. (with a plate). **55** (2) : 338-339.
- The Shou or 'Sikkim Stag'. An appeal for information on its present status. (with a plate). **55** (3) : 556-558.
- The present status of the Whitewinged Wood Duck, [*Cairina scutulata* (S. Müller)]. (with a plate). **55** (3) : 569-575.
- 1959 The Great Indian Rhinoceros (*R. unicornis*) in Nepal. Report of a fact-finding survey, April-May 1959. (with three plates and three maps). **56** (3) : 484-510.
- Albinism and Partial Albinism in Tigers. (with a plate). **56** (3) : 581-587.
- 1960 The breeding of the Grey or Spottedbilled Pelican, *Pelecaeus philippensis* Gmelin. (with four plates). **57** (2) : 245-251.
- Report on the status of the Brow-antlered Deer of Manipur (India) : October-November 1959 and March 1960. (with three plates and three maps). **57** (3) : 597-617.
- 1961 The distribution and feeding habits of the Golden Langur, *Presbytis geei* Gee (Khajuria, 1956). (with two maps and three plates). **58** (1) : 1-12.
- The Wildfowl Trust at Slimbridge in Britain. (with two plates). **58** (2) : 429-432.
- Some notes on the Golden Cat, (*Felis temmincki* Vigors & Horsfield). (with two plates). **58** (2) : 508-511.
- 1962 The Management of India's Wild Life Sanctuaries and National Parks, Part IV. (with two plates). **59** (2) : 453-485.
- A Leopard Cat (*Felis bengalensis* Kerr) in captivity. (with a plate). **59** (2) : 641-642.
- 1963 The Indian Wild Ass : A Survey—February 1962. (with a plate and a map). **60** (3) : 516-529.
- 1965 Report on the status of the Kashmir Stag : October 1965. (with one coloured and four monochrome plates). **62** (3) : 379-393.

- 1966 A Note on the Conference on Conservation of Nature and Natural Resources in Tropical South-east Asia held at Bangkok, Thailand—November 29 to December 4, 1965. (with a plate). 63 (1) : 162-166.
- 1967 The Management of India's Wild Life Sanctuaries and National Parks, Part V. 64 (2) : 339-341.
- Occurrence of the Brown Bear, (*Ursus arctos* Linnaeus) in Bhutan. 64 (3) : 551-552.
- Occurrence of the Snow Leopard, *Panthera uncia* (Schreber), in Bhutan. 64 (3) : 552-553.
- Occurrence of the Nayan or Great Tibetan Sheep, (*Ovis ammon hodgsoni* Blyth) in Bhutan. 64 (3) : 553-554.

Reviews

1. THE PROBLEMS OF BIRDS AS PESTS. (Proceedings of a Symposium held at the Royal Geographical Society, London, on 28 and 29 September 1967.) Edited by R. K. Murton and E. N. Wright. 254 pp. (15×23 cm.). Academic Press, London & New York. Price 70s.

In the context of our fast-changing world this is a timely publication, of very direct usefulness and importance to those who must try to resolve the increasing conflict between birds and men. The two main topics discussed at the Symposium were Birds and Aircraft and Birds and Agriculture. Many of the specialists taking part were at the same time ornithologists or conservationists, or both; therefore their views bear the stamp of authority.

As the Chairman of the Symposium, Sir A. Landsborough Thomson stressed in his Introduction, this Symposium was not conceived in any spirit of hostility of bird life, and it is refreshingly obvious from the Proceedings that the discussions were conducted dispassionately and objectively to determine the facts and consider what to do.

Birds and Aircraft is a subject of mounting concern. The advent of the jet engine and the increasing speed and size of modern aeroplanes, especially military aircraft, have considerably enhanced the hazards of collision with birds. The danger from bird strikes is particularly great to low-flying military aircraft while trying to avoid radar detection, or in the process of take-off or landing. Jet engines are vulnerable to serious crippling, or even complete failure, after sucking in a bird or several from a flock, and the number of such accidents is increasing daily with the increase in air traffic throughout the world. Many very serious mishaps have occurred in recent years involving loss of life and wrecking or heavy damage to expensive aircraft. The problem is of mounting concern to every one connected with the business of flying—passengers, airlines, military air services as well as aircraft designers. In this country the Bombay Natural History Society is constantly receiving from the Indian Air Force authorities feathers and battered remains of birds sucked in by the jet engines of military planes. This has sometimes resulted in serious accidents, and in all cases necessitated expensive repairs. The hazard from direct strikes by large birds mostly kites and vultures is also considerable, especially in the neighbourhood of airfields.

Research along many lines is being zealously pursued in many countries of Europe, and in America, to find practicable solutions to this growing menace. Many ingenious methods have been tried with varying degrees of success. Many others continue to be devised and experimented with to keep birds away from airfields. These include playing back tape-recorded alarm and distress calls of the birds through a network of loudspeakers around the runways, modifying the habitat by removal of sand-dunes, and other natural features that produce favourable air currents for low-level soaring and gliding by certain large birds, and noisy automatically firing scaring devices to keep birds out of the way of aeroplanes. Some of the measures prove moderately successful at first, but the birds soon become 'acclimatized' to the innovations and revert to their old ways. Side by side with these continue endeavours on the part of aircraft designers to add physical protection to aircraft against bird-strikes or modify the design to make them inherently safer in this regard. The opening chapter of the Proceedings gives a comprehensive survey of the Problems of Birds and Aircraft. Another on Recent Developments in Bird-scaring on Airfields is especially illuminating, and the discussions amongst the participants in the Symposium which follow add to its usefulness. Some of the developments cited are dealt with specifically and in detail in the other chapters. There is one chapter, tantalizingly interesting but—perhaps too technical for the non-specialist—on Bird Recognition by Radar: A Study in Quantitative Radar Ornithology—a subject which by providing in advance an indication of the size, weight, manner of flight, etc. of the bird or birds on the radar screen, is shown to have a direct application to the strike hazard problem.

Birds and Agriculture is another topic of very immediate and considerable interest to us in India. Unfortunately sufficient importance is not attached to the problem by our agricultural authorities in spite of its obvious potentiality for making the 'Green Revolution' greener if tackled scientifically and in the right manner. It is admittedly a complex investigation, but studies in European countries and in America have proved that the research is well worth while. In the context of the growing mechanization of our farming, and the changing pattern of agriculture due to modern techniques, the Symposium on birds and agriculture is especially relevant. Some birds are responsible for direct damage to crops by devouring grains, some confer direct benefit, may be to the selfsame crops, by devouring highly injurious insect pests. Other species play a dual role—harmful at one season, beneficial at

another. The goal of research in Economic Ornithology is first to determine, by intensive life history studies, which species are harmful on balance and which beneficial, and having done so to devise practicable methods to encourage the good ones and discourage the bad. Outright slaughter of visibly harmful species may look like an easy short-cut, but it is not the answer.

Four chapters in the proceedings deal specifically with individual birds or bird groups: The Rook Problem in NE. Scotland, Bullfinches and Fruit-buds, The Oystercatcher as a pest of Shellfisheries, and the Quelea Problem in Africa. Two other chapters entitled 'Some Predator-Prey Relationships in Bird Damage and Population Control', and 'Urban Bird Populations' are of wider general application. The discussions of the various problems by the participating experts bring out in relief a spate of valuable supplemental information and offer suggestive ideas for the planning and execution of similar studies in India. The Symposium has been a meaningful and highly rewarding exercise. Ornithologists, and even persons not directly connected with the problems dealt with, will find the Proceedings inspiring and of much practical usefulness.

S.A.

2. THE OXFORD BOOK OF INSECTS. Illustrations by Joyce Bee, Derek Whiteley, and Peter Parks. Text by John Burton, with I. H. H. Yarrow, A. A. Allen, L. Parmenter, and I. Lansbury. pp. viii+208 (24×17 cm.). 96 plates in colour. London, 1968. Oxford University Press. Price 50s. net.

This book continues the high standard of its predecessors in the series THE OXFORD BOOK OF BIRDS and THE OXFORD BOOK OF FLOWERLESS PLANTS, which have already been noticed in the beautiful coloured illustrations, drawn from life or from a combination of preserved specimens and colour photographs, recording form and colour in minute detail and calculated to make for easy identification. About 800 different insect species, a fair selection of the 25 Orders of British Insects, are illustrated in 96 plates, as many as ten (in a few cases, more) being collected on a single plate without making it appear unduly crowded. The plates are arranged under certain broad heads, such as: Wingless Insects; Dragonflies and Damselflies; Mayflies, Stoneflies, and Earwings; Crickets, Grasshoppers, etc., and so on. The accompanying text takes shape accordingly, a general commentary, followed by short notes on each of the forms illustrated. Short as are

these commentaries and notes, John Burton and his specialist helpers have made them both informative and interesting. Technical language has been largely avoided. Tucked away modestly at the back of the book are a short explanation of insect classification, an equally short description of insect structure, a brief account of the 25 Orders of British insects, and finally something about 'Metamorphosis of Insects' and 'Protection from Enemies'. The book ends with a bibliography, classified under the heads: A, suitable for beginners; B, for identification and general reading; and C, books of reference.

This is the sort of book that makes one look longingly and say to oneself: Why cannot we have books like this for our country? The answer suggests itself: Perhaps we will, in time, if our people, especially those of the coming generation, are given sufficient opportunities of seeing such books. Apart from this consideration, the book should find ready sale in India as many of the insects illustrated here are either found in India or are closely related to Indian forms.

The book is well worth the price asked for.

D. E. R.

3. A CEREMONIAL OX OF INDIA. The mithan in nature, culture, and history—with notes on the domestication of common cattle. By Frederick J. Simoons with the assistance of Elizabeth S. Simoons and illustrations by Gene M. Christman. pp. xvi+323 (23×15 cm.). Madison, Milwaukee, and London, 1968. University of Wisconsin Press. Price \$ 11.

The authors were in southern Asia in 1963-64 investigating dairying and the use of milk 'from a geographic and culture historic point of view', trying in particular to locate groups which were reluctant to consume milk as food. This was when they became aware of the mithan, *Bos frontalis*, 'a strange-looking domesticated bovine animal which was not milked'. They set themselves to find out all they could about this little-known animal, and this book is the result. There is an 18-page list of references, in which the only surprising omission is T. H. Lewin's A FLY ON THE WHEEL, that excellent book commended by *Hobson-Jobson* in which the animals are described as 'beautiful creatures, with broad fronts, sharp wide-spreading horns, and mild, melancholy eyes' with a call 'something between a bull's bellow and a railway whistle'. Not content with books, the authors corresponded with J. H. Hutton, C. R. Stonor, C. von Fürer-Haimendorf, H. E. Kauffmann and others who had lived in mithan country, and with George

Schaller who made proofs of *THE DEER AND THE TIGER* available to them. It was obviously a labour of love, and the result is a convincing, well-organized, well-illustrated and well-indexed book of mithan-lore. The animal has many hybrid forms, and is to be found today in a browsing niche between 2000 and 9000 ft. in the forested hills between Bhutan and Arakan. It is used for sacrifice and currency, but not traction or milking, by the Apa Tani, Lhota Naga and many other tribal peoples, some of whom are here described.

The conclusion is that the present condition of the mithan—free-ranging, feeding itself and having little contact with man—is typical of the earliest domesticated cattle. Early man wanted bovines for sacrifice, to ensure the preservation of his family and the fertility of his crops. It was only much later that he needed the daily presence of bovines for ploughing or milking. The authors sum up: 'The archaeological evidence at present available suggests that the earliest bovine domesticates, found from Afghanistan to Hungary, were common cattle, and that these were the first domesticated bovines involved with the (fertility) cult. If common cattle were indeed earliest, the domestication of the water buffalo and gaur in India was probably in imitation of common cattle. We believe that the mithan was first domesticated in imitation of water buffalo; that the domestication was carried out somewhere in the Naga-Chin country, by ancestors of one of the present-day groups or by some "Tibeto-Burman" group that preceded them; and that fertility concerns and sacrificial needs were important in the domestication'.

R. E. H.

4. *THE WILD ANIMALS OF BURMA*. By U Tun Yin. pp. xi+301 (16.5×24.5 cm.). Rangoon, 1967. Rangoon Gazette Ltd. Price not marked.

After the War, almost no information of natural history matters has come in from Burma. It was, therefore, a pleasant surprise to see this book. As explained in the Preface, it is mainly a compilation and large portions of the text are verbatim quotations from earlier publications.

All species of mammals occurring in Burma are not mentioned, rats, bats and shrews at least being excluded. There is no indication as to how the selection has been made. The Introduction contains a summary of the history of mammalogical work in Burma, and it is significant that subsequent to the paper on the Rhinoceros (published